Premises Sub Group Meeting Notes 9-22-2014

Attendees: Alice Low, Stacy Sherman, Rosemary Hartman, Dave Contreras, Chris Enright, Louise Conrad, Steve Slater, Carol Atkins, Ramona Swenson, Larry Brown, Pascale Goertler, Shawn Acuna, Adam Ballard, Hildie Spautz, Anitra Pawley, Lori Smith, Jennifer Bigman

The premises presented at today's meeting are intended to be general with the intent of developing more specific hypothesis for future tidal restoration sites. Issues were rearranged to mimic the format of the conceptual models (bottom to top).

Tiers 1 and 2: Landscape and Local Attributes

<u>Issue 1 Comments:</u>

- Does climate refer to "current" weather patterns or long term climate change?
 - Climate refers to both
- This issue does not address ecocline or other important factors such as geomorphology
- How do premises relate to issues?
 - Issues are the problem statements, or context. Premises are the expected outcome.

Premise 1.1 Comment:

 Change "will be influenced by" to "will influence and be influenced by"

Premise 1.2 Comments:

- Change "reference sites" to "existing tidal wetlands"
- Other models may be needed because comparing "existing tidal wetlands" may not be feasible
- Change the term "restored site" (implies a fully restored site) to restoration or restoring site, or simply tidal wetland sites
- Rather than comparing wetland sites, the team should understand the evolution of restoring tidal wetlands

Premise 1.3 Comment:

Premise is redundant and should be removed

Issue 2 Comments:

- Remove "contributed to species declines by" and "area"
- Issue appears to be incomplete because it doesn't talk about how habitat loss affects species populations
- Resilience needs to be defined
- The premises from issue two appear to be fish centric and it may be beneficial to add a premise of other benefits
- A fourth premise should be added addressing accessibility and the interconnectedness of the restored site

Premise 2.1 Comment:

Premises should be split to address how tidal wetland restoration will
(1) increase habitat availability; (2) increase food web support for fish

Premise 2.3 (formerly 2.2) Comment:

• This premise should be food web centric

Tier 3: Physical Site Attributes

- Change order of issues to start with Physical followed by Water Quality attributes and add chemical to tier title
 - For all premises, delete all references comparing to pre-project conditions

Issue 3 (formerly Issue 4) Comment

No comments

Premise 3.1 (formerly Premise 4.1) Comment:

No comments

Premise 3.2 (formerly Premise 4.2) Comment:

No comments

Issue 4 (formerly Issue 3) Comments:

- Change "residence time" to "habitat use"
- Compliance monitoring will be coordinated for each site, but not added to our plan
- The Fish Restoration Program would like a group to get together to split this issue into multiple, more specific issues

Premise 4.1 (formerly Premise 3.1) Comment:

 Final simplification: Change premise to "Tidal restoration will change water quality of the restored site and surrounding areas"

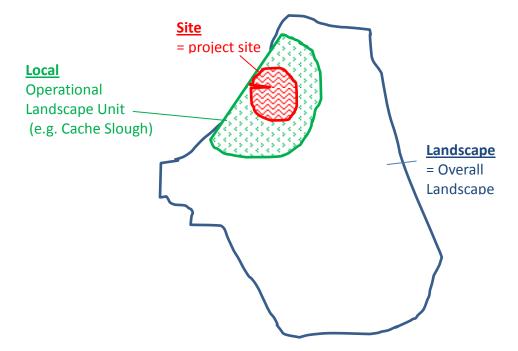
Tier 4: Biotic Site Attributes

 Another issue and set of premises should be added to address how the biotic structure affects the water quality. (Carol Atkins volunteered to draft and share at Oct. 1st PWT meeting)

Issue 5 Comments:

- What's the difference between landscape, local, and site?
 - Landscape an area extending outside the local and project site areas

Local – an area within the proximity of the project site Site – the area being studied



Premise 5.1 Comment:

 Final simplification: Change premise to "Restoration of tidal wetlands will increase primary productivity and secondary productivity"

Premise 5.2 Comment:

Delete "compared to pre project conditions"

Issue 6 Comment:

• Add "secondary production"

Premise 6.1 Comments:

- Add "secondary production"
- Remove "colonization"
- Change "limit" to "reduce"
- Change "may" to "will"

Issue 7 Comments:

- Delete "structure"
- Delete "have altered the turbidity, tidal velocity, temperature, and habitat"
- Change "invasion of aquatic weeds" to "increase of invasive aquatic weeds"
- Final simplification: Change issue to "Changes in plant community composition and architecture have decreased suitability of habitat for at-risk fish species"

Premise 7.1 Comments:

- Delete "relative to pre project conditions"
- Final simplification: Change premise to "Tidal wetland restoration will result in changes to vegetation architecture and plant species composition that may contribute to alteration of fish community composition"

Issue 8 Comments:

- Delete "in the Delta and Suisun Marsh"
- Add "reproduction" and "habitat use"
- Change "limits" to "reduce" to "affects"
- A premise should be added to address any positive outcomes for native fish refuge

Premise 8.1 Comments:

- Change "may" to "will"
- Delete "further" and "relative to pre-project conditions

Premise 8.2 Comment:

• Change "limiting" to "affecting"

Tier 5: Wetland Production

Change Tier description to "Wetland Production and Transport"

Issue 9 Comment:

No comments

Premise 9.1 Comments:

- Add exchanging of materials and energy within the wetlands
- Change "flux" to "transport" since transport is a general term that incorporates flux
 - The term flux should be used because it describes import to and export from the site

Premise 9.2 Comments:

- Change "may" to "will"
- Delete "access to suitable habitat"